

Naresh K. Malhotra

David F. Birks

Third European Edition

Marketing Research

An Applied Approach



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Brief contents



Preface	xiii
Publisher's acknowledgements	xvii
Guided tour	xviii
About the authors	xxi
1 Introduction to marketing research	1
2 Defining the marketing research problem and developng a research approach	32
3 Research design	62
4 Secondary data collection and analysis	92
5 Internal secondary data and the use of databases	122
6 Qualitative research: its nature and approaches	148
7 Qualitative research: focus group discussions	179
8 Qualitative research: depth interviewing and projective techniques	205
9 Qualitative research: data analysis	231
10 Survey and quantitative observation techniques	264
11 Causal research design: experimentation	301
12 Measurement and scaling: fundamentals, comparative and non-comparative scaling	334
13 Questionnaire design	369
14 Sampling: design and procedures	403
15 Sampling: final and initial sample size determination	431
16 Survey fieldwork	459
17 Data preparation	474
18 Frequency distribution, cross-tabulation and hypothesis testing	502
19 Analysis of variance and covariance	544
20 Identifying relationships	573
21 Discriminant analysis	617
22 Factor analysis	645
23 Cluster anaylsis	670
24 Multidimensional scaling and conjoint analysis	692
25 Report preparation and presentation	722
26 International marketing research	742
27 Business-to-business (b2b) marketing research	766
Appendix: Statistical tables	795
Glossary	806
Indexes	821

To the memory of Harry Birks

Contents



Preface	xiii	Research design from the decision-makers' perspective	65
Publisher's acknowledgements	xvii	Research design from the respondents' perspective	66
Guided tour	xviii	Research design classification	69
About the authors	xxi	Descriptive research	73
		Causal research	79
1 Introduction to marketing research	1	Relationships between exploratory, descriptive and causal research	79
Objectives	1	Potential sources of error in research designs	83
Overview	2	<i>International marketing research</i>	86
What does market research encompass?	2	<i>Ethics in marketing research</i>	87
Definition of marketing research	6	<i>Internet and computer applications</i>	88
The marketing research process	7	Summary	88
A classification of marketing research	11	Questions	89
The global marketing research industry	13	Exercises	90
The limitations of marketing research	17	Notes	90
The future – the growing demand for managerial skills in marketing researchers	21		
Supporting decision-makers in sports marketing	24	4 Secondary data collection and analysis	92
<i>International marketing research</i>	24	Objectives	92
<i>Ethics in marketing research</i>	25	Overview	93
<i>Internet and computer applications</i>	27	Defining primary data, secondary data and marketing intelligence	94
Summary	28	Advantages and uses of secondary data	96
Questions	29	Disadvantages of secondary data	96
Exercises	30	Criteria for evaluating secondary data	97
Notes	30	Classification of secondary data	100
		Published external secondary sources	101
2 Defining the marketing research problem and developing a research approach	32	Computerised databases	104
Objectives	32	Classification of computerised databases	104
Overview	33	Syndicated sources of secondary data	106
Importance of defining the problem	34	Syndicated data from households	108
The marketing research brief	35	Syndicated data from institutions	114
The marketing research proposal	38	<i>International marketing research</i>	115
The process of defining the problem and developing a research approach	42	<i>Ethics in marketing research</i>	116
Marketing decision problem and marketing research problem	46	<i>Internet and computer applications</i>	117
Defining the marketing research problem	47	Summary	118
Components of the research approach	49	Questions	119
<i>International marketing research</i>	55	Exercises	119
<i>Ethics in marketing research</i>	57	Notes	120
<i>Internet and computer applications</i>	58		
Summary	59	5 Internal secondary data and the use of databases	122
Questions	60	Objectives	122
Exercises	60	Overview	123
Notes	61	Internal secondary data	124
		Scanning devices	126
3 Research design	62	Relating customer data to scanning systems	126
Objectives	62	Geodemographic data	129
Overview	63	Linking different types of data	134
Research design definition	64	Stages of development in using databases and survey data to build portfolios of customers and model marketing decisions	135

Contents

The datawarehouse	136	Summary	227
Data mining	138	Questions	228
Databases and marketing research	139	Exercises	229
<i>International marketing research</i>	141	Notes	229
<i>Ethics in marketing research</i>	142		
<i>Internet and computer applications</i>	143		
Summary	144		
Questions	145		
Exercises	146		
Notes	147		
6 Qualitative research: its nature and approaches	148	9 Qualitative research: data analysis	231
Objectives	148	Objectives	231
Overview	149	Overview	232
Primary data: qualitative versus quantitative research	152	The qualitative researcher	233
Rationale for using qualitative research	153	The process of qualitative data analysis	236
Philosophy and qualitative research	155	Grounded theory	248
Ethnographic research	161	Content analysis	251
Grounded theory	166	Semiotics	252
Action research	169	Using computers in qualitative research and analysis	254
<i>Ethics in marketing research</i>	172	<i>International marketing research</i>	258
<i>Internet and computer applications</i>	173	<i>Ethics in marketing research</i>	259
Summary	175	Summary	260
Questions	176	Questions	261
Exercises	177	Exercises	261
Notes	177	Notes	262
7 Qualitative research: focus group discussions	179	10 Survey and quantitative observation techniques	264
Objectives	179	Objectives	264
Overview	180	Overview	265
Classifying qualitative research techniques	181	Survey techniques	265
Focus group discussions	182	Telephone interviews	267
Planning and conducting focus groups	188	Personal interviews	269
The moderator	193	Mail interviews	272
Other variations of focus groups	194	Electronic interviews	273
Other types of qualitative group discussions	195	A comparative evaluation of survey techniques	275
Misconceptions about focus groups	196	Selection of survey method(s)	283
<i>International marketing research</i>	198	Observation techniques	283
<i>Ethics in marketing research</i>	200	Observation techniques classified by mode of administration	285
<i>Internet and computer applications</i>	201	A comparative evaluation of observation techniques	288
Summary	202	Advantages and disadvantages of observation techniques	289
Questions	203	<i>International marketing research</i>	290
Exercises	203	<i>Ethics in marketing research</i>	292
Notes	204	<i>Internet and computer applications</i>	294
		Summary	296
		Questions	297
		Exercises	298
		Notes	298
8 Qualitative research: in-depth interviewing and projective techniques	205	11 Causal research design: experimentation	301
Objectives	205	Objectives	301
Overview	206	Overview	302
In-depth interviews	207	Concept of causality	302
Projective techniques	217	Conditions for causality	303
Comparison between qualitative techniques	222	Definitions and concepts	306
<i>International marketing research</i>	223	Definition of symbols	307
<i>Ethics in marketing research</i>	224	Validity in experimentation	307
<i>Internet and computer applications</i>	226	Extraneous variables	308

Controlling extraneous variables	310	Eliminate problems by pilot-testing	391
A classification of experimental designs	312	Summarising the questionnaire design process	392
Pre-experimental designs	313	<i>International marketing research</i>	394
True experimental designs	315	<i>Ethics in marketing research</i>	396
Quasi-experimental designs	317	<i>Internet and computer applications</i>	397
Statistical designs	319	<i>Summary</i>	398
Laboratory versus field experiments	322	<i>Questions</i>	399
Experimental versus non-experimental designs	323	<i>Exercises</i>	400
Application: test marketing	324	<i>Notes</i>	400
<i>International marketing research</i>	326		
<i>Ethics in marketing research</i>	327	14 Sampling: design and procedures	403
<i>Internet and computer applications</i>	329	<i>Objectives</i>	403
<i>Summary</i>	329	<i>Overview</i>	404
<i>Questions</i>	330	Sample or census	405
<i>Exercises</i>	331	The sampling design process	406
<i>Notes</i>	331	A classification of sampling techniques	410
		Non-probability sampling techniques	411
12 Measurement and scaling: fundamentals, comparative and non-comparative scaling	334	Probability sampling techniques	415
<i>Objectives</i>	334	Choosing non-probability versus probability sampling	421
<i>Overview</i>	335	Summary of sampling techniques	422
Measurement and scaling	336	<i>International marketing research</i>	424
Primary scales of measurement	336	<i>Ethics in marketing research</i>	425
A comparison of scaling techniques	341	<i>Internet and computer applications</i>	425
Comparative scaling techniques	342	<i>Summary</i>	427
Non-comparative scaling techniques	347	<i>Questions</i>	428
Itemised rating scales	348	<i>Exercises</i>	428
Itemised rating scale decisions	351	<i>Notes</i>	429
The development and evaluation of scales	355		
Choosing a scaling technique	360	15 Sampling: final and initial sample size determination	431
Mathematically derived scales	360	<i>Objectives</i>	431
<i>International marketing research</i>	361	<i>Overview</i>	432
<i>Ethics in marketing research</i>	362	Definitions and symbols	433
<i>Internet and computer applications</i>	362	The sampling distribution	434
<i>Summary</i>	363	Statistical approaches to determining sample size	436
<i>Questions</i>	364	The confidence interval approach	436
<i>Exercises</i>	365	Multiple characteristics and parameters	442
<i>Notes</i>	365	Other probability sampling techniques	442
		Adjusting the statistically determined sample size	443
13 Questionnaire design	369	Non-response issues in sampling	443
<i>Objectives</i>	369	<i>International marketing research</i>	450
<i>Overview</i>	370	<i>Ethics in marketing research</i>	451
Questionnaire definition	371	<i>Internet and computer applications</i>	452
Questionnaire design process	372	<i>Summary</i>	452
Specify the information needed	374	<i>Questions</i>	453
Specify the type of interviewing method	375	<i>Exercises</i>	454
Determine the content of individual questions	377	<i>Appendix: The normal distribution</i>	455
Overcome the respondent's inability and unwillingness to answer	378	<i>Notes</i>	457
Choose question structure	381	16 Survey fieldwork	459
Choose question wording	384	<i>Objectives</i>	459
Use unambiguous words	385	<i>Overview</i>	460
Arrange the questions in proper order	387	The nature of survey fieldwork	461
Identify the form and layout	390	Survey fieldwork and the data collection process	461
Reproduce the questionnaire	390	Selecting survey fieldworkers	461

Training survey fieldworkers	462	Statistics associated with one-way ANOVA	548
Recording the answers	465	Conducting one-way ANOVA	548
Supervising survey fieldworkers	467	N-way ANOVA	555
Validating survey fieldwork	468	Analysis of covariance (ANCOVA)	560
Evaluating survey fieldworkers	468	Issues in interpretation	561
<i>International marketing research</i>	469	Repeated measures ANOVA	564
<i>Ethics in marketing research</i>	470	Non-metric ANOVA	565
<i>Internet and computer applications</i>	470	Multivariate ANOVA	566
<i>Summary</i>	471	<i>Internet and computer applications</i>	566
<i>Questions</i>	472	<i>Summary</i>	567
<i>Exercises</i>	472	<i>Questions</i>	568
<i>Notes</i>	473	<i>Exercises</i>	569
		<i>Notes</i>	571
17 Data preparation	474	20 Identifying relationships	573
<i>Objectives</i>	474	<i>Objectives</i>	573
<i>Overview</i>	475	<i>Overview</i>	574
The data preparation process	476	Product moment correlation	575
Checking the questionnaire	477	Partial correlation	578
Editing	477	Non-metric correlation	581
Coding	479	Regression analysis	581
Transcribing	485	Bivariate regression	582
Cleaning the data	486	Statistics associated with bivariate regression analysis	582
Statistically adjusting the data	488	Conducting bivariate regression analysis	583
Selecting a data analysis strategy	491	Multiple regression	590
<i>International marketing research</i>	494	Statistics associated with multiple regression	591
<i>Ethics in marketing research</i>	496	Conducting multiple regression analysis	592
<i>Internet and computer applications</i>	497	Multicollinearity	601
<i>Summary</i>	499	Relative importance of predictors	601
<i>Questions</i>	499	Cross-validation	602
<i>Exercises</i>	500	Regression with dummy variables	603
<i>Notes</i>	500	Analysis of variance and covariance with regression	603
		Structural equation modelling	604
18 Frequency distribution, cross-tabulation and hypothesis testing	502	<i>Internet and computer applications</i>	609
<i>Objectives</i>	502	<i>Summary</i>	611
<i>Overview</i>	503	<i>Questions</i>	612
Frequency distribution	506	<i>Exercises</i>	612
Statistics associated with frequency distribution	508	<i>Notes</i>	615
Measures of shape	510	21 Discriminant analysis	617
A general procedure for hypothesis testing	511	<i>Objectives</i>	617
Cross-tabulations	516	<i>Overview</i>	618
Hypothesis testing related to differences	525	Basic concept	618
Parametric tests	526	Relationship to regression and ANOVA	619
Non-parametric tests	532	Discriminant analysis model	620
<i>Internet and computer applications</i>	537	Statistics associated with discriminant analysis	620
<i>Summary</i>	539	Conducting discriminant analysis	621
<i>Questions</i>	539	Conducting multiple discriminant analysis	631
<i>Exercises</i>	540	Stepwise discriminant analysis	638
<i>Notes</i>	542	<i>Internet and computer applications</i>	640
		<i>Summary</i>	640
19 Analysis of variance and covariance	544	<i>Questions</i>	641
<i>Objectives</i>	544	<i>Exercises</i>	641
<i>Overview</i>	545	<i>Appendix: Estimation of discriminant function coefficients</i>	642
Relationship among techniques	546	<i>Notes</i>	643
One-way ANOVA	547		

22 Factor analysis	645	Importance of the report and presentation	724
Objectives	645	Preparation and presentation process	724
Overview	646	Report preparation	725
Basic concept	646	Oral presentation	733
Factor analysis model	647	Research follow-up	735
Statistics associated with factor analysis	648	<i>International marketing research</i>	736
Conducting factor analysis	649	<i>Ethics in marketing research</i>	736
Applications of common factor analysis	660	<i>Internet and computer applications</i>	737
<i>Internet and computer applications</i>	664	Summary	738
Summary	664	Questions	740
Questions	665	Exercises	740
Exercises	666	Notes	741
Appendix: Fundamental equations of factor analysis	667		
Notes	669		
23 Cluster analysis	670	26 International marketing research	742
Objectives	670	Objectives	742
Overview	671	Overview	743
Basic concept	671	What is international marketing research?	744
Statistics associated with cluster analysis	673	A framework for international marketing research	746
Conducting cluster analysis	674	Secondary data	752
Applications of non-hierarchical clustering	684	Qualitative techniques	753
Clustering variables	686	Survey methods	755
<i>Internet and computer applications</i>	687	Measurement and scaling	758
Summary	688	Questionnaire translation	760
Questions	689	<i>Ethics in marketing research</i>	761
Exercises	689	<i>Internet and computer applications</i>	762
Notes	690	Summary	763
		Questions	764
		Exercises	764
		Notes	765
24 Multidimensional scaling and conjoint analysis	692	27 Business-to-business (b2b) marketing research	766
Objectives	692	Objectives	766
Overview	693	Overview	767
Basic concepts in MDS	694	What is b2b marketing?	769
Statistics and terms associated with MDS	695	Introducing the distinction between b2b and consumer marketing	769
Conducting MDS	695	Bases for the distinction of b2b marketing research	771
Assumptions and limitations of MDS	702	Implications of the differences between business and consumer purchases for marketing researchers	773
Scaling preference data	702	The growth of competitive intelligence	785
Correspondence analysis	703	<i>International marketing research</i>	787
Relationship between MDS, factor analysis and discriminant analysis	704	<i>Ethics in marketing research</i>	789
Basic concepts in conjoint analysis	704	<i>Internet and computer applications</i>	790
Statistics and terms associated with conjoint analysis	705	Summary	791
Conducting conjoint analysis	706	Questions	792
Assumptions and limitations of conjoint analysis	714	Exercises	792
Hybrid conjoint analysis	714	Notes	793
<i>Internet and computer applications</i>	716		
Summary	717	Appendix: Statistical tables	795
Questions	717	Glossary	806
Exercises	718	Subject index	821
Notes	719	Name index	833
		Company index	834
25 Report preparation and presentation	722		
Objectives	722		
Overview	723		

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Working as a marketing researcher is a very creative task. This creativity is nurtured by an industry and a discipline that is undergoing enormous changes. Decision-makers that use marketing research are demanding greater value for their research spend, a much quicker turnaround of research projects and more insight to, and integration of, any information collected. Industry competition is emerging and growing from suppliers of competitive intelligence, management consultants, customer database analysts and low-cost survey suppliers using new technologies. In addition, respondents are becoming more aware of the value of their knowledge. With many surveys used to generate news items or sales leads, respondents are more sceptical of the motives and value of surveys, creating major challenges for the genuine marketing researcher. These challenges also create enormous opportunities for marketing researchers who use their skills to fully grasp the changes occurring in today's business world.

Marketing researchers must be able to cope with the technical challenges to plan, gather, analyse and interpret information. They must be aware of the challenges faced by the array of decision-makers that trust sound marketing research. They must be able to empathise with the people they aim to question and observe, and to treat them with care and respect. Marketing researchers that rise to the emerging challenges can have a genuine impact on the strategic direction of a company. Their future is very bright, stimulating and rewarding.

Understanding the emerging marketing research challenges, developing creativity, finding the confidence to conduct research and to discover insight in findings may seem difficult with so many options to consider. This is where we believe *Marketing Research: An Applied Approach*, Third European Edition can help. Founded on the enormously successful American editions and the First and Second European editions, this text aims to be comprehensive, authoritative and applied. This edition includes an array of European and international examples, practices and illustrations. It portrays a balance of qualitative and quantitative approaches to conducting research that allows the creative support of decision-makers. It will guide the reader through the challenges faced in conducting marketing research of the highest quality. This is achieved through an appropriate blend of scholarship with a highly applied and managerial orientation.

The book

The book is written for use at both the undergraduate and postgraduate levels. The coverage is comprehensive and the depth and breadth of topics are well suited to both levels. The material is presented in a manner that is easy to read and understand. There are numerous diagrams, tables and examples to help explain and illustrate the basic concepts. If a chapter does not cover a particular topic in sufficient depth, there are numerous references to follow a line of enquiry. The web addresses presented throughout allow for further illustration of ideas and, in many instances, demonstration versions of software. The companion website presents a *Marketing Research Software* section, links to the book's companion Marketing Research agency – Sports Marketing Surveys – more European cases, exercises and web links.

Marketing research is defined as a topic with a clear demonstration of how it may support effective decision-making. This definition is set in the context of the nature and dynamics of the marketing research industry. The limitations of marketing research are recognised, as are other means of information support that decision-makers turn to. The process of conducting marketing research is described in six stages. Each of these stages is fully described and illustrated. Working out an approach and research design is discussed as a foundation to administering techniques. The justification for the use of qualitative and quantitative techniques is made, with a demonstration of how they may mutually support each other. The administration of a broad range of qualitative and quantitative techniques is presented. Sampling issues for both qualitative and quantitative studies are discussed. Issues of ensuring the quality of data and preparing for data analysis are covered. Qualitative data analysis is discussed in detail. Quantitative data analysis from simple descriptive statistics to sophisticated multivariate techniques is worked through in seven chapters. Presenting research findings in both oral and written formats is covered, with an emphasis on ensuring that the interpretation of research findings really supports decision-makers.

Applications of marketing research in an international context are tackled in most chapters; this vital topic also has a distinct chapter in its own right. Applying marketing research in a b2b context is illustrated in many parts of the text but, as a vital topic for the industry with many challenges, it has a distinct chapter in its own right. The ethical practice of marketing research and the dilemmas that researchers face are also tackled in most chapters. Discussion of the impact of the Internet and IT on marketing research is integrated throughout the text but is also dealt with at the end of each chapter.

Being an excellent marketing researcher requires an appreciation of, and continual practice of, all the elements discussed in this text. This book firmly sets you on that path of creativity and excellence.

New for this edition

Revisions to existing chapters We have retained the most desirable features of the first five American editions and the first two European editions. In all chapters that tackle quantitative techniques and analysis, none of the well-regarded material has been lost. Changes have been made to improve the clarity of explanations, with many new examples and updated references. Developments in the use of databases have made substantial changes in how decision-makers are supported. These developments are tackled in the revisions to the chapter that covers 'internal secondary data and the use of databases'. In the chapter devoted to qualitative data analysis, particular emphasis has been placed upon clarifying the nature of grounded theory, content analysis and semiotics. In the chapter devoted to correlation and regression, a new section is devoted to structural equation modelling. All chapters have benefitted from more up-to-date references and, where appropriate, more relevant examples that reflect the European and international focus. At the end of each chapter, a new section is presented with five stimulating Exercises that can be conducted individually or in teams, both in and out of the classroom.

Web links The pace of new technological developments in the marketing research industry is breathtaking. Trying to keep up with them is a thankless task. It can be guaranteed that as soon as any publication hits the shelves, much material on technology can be out of date. Many of the new developments that have a demonstrable impact on the practice of marketing research, especially through the use of the Internet, have been incorporated into each chapter. To maintain the currency of technology, the web addresses of the major research associations, national statistical bodies, and research organisations are presented. The web addresses of major suppliers of qualitative analysis packages, questionnaire design, survey processing and statistical analysis are also presented. Care has been taken to choose those where good case illustrations and demo versions are available, in a variety of formats to suit individual users.

CD demonstration software The CD that accompanies this edition contains demonstration software for quantitative and qualitative researchers.

- 1 Snap8 www.snapsurveys.com is powerful user-friendly software that has driven standards in survey design and analysis in the marketing research industry for over 25 years. It is now used in over 50 countries worldwide. With Snap8, questionnaires can be created and published for surveys that use paper, web, email and computer-assisted personal and telephone interviews. It can then offer options to key or scan data or even to collect data automatically. Survey results can be analysed, statistics calculated and tables and charts produced. These features briefly summarise how the software helps to manage a great array of survey designs. By working through the demo, the detail of support in survey design, i.e. the array of functions available, will become apparent. The demo will bring to life the challenges to questionnaire and survey designers and the solutions they use in practice.
- 2 XSight www.qsrinternational.com is a new product that offers customised data analysis software for qualitative marketing researchers. The software has been developed by QSR International who are world leaders in qualitative research software as used in a variety of applications. Academic marketing researchers that use qualitative analysis software would be familiar with QSR's NVivo package, which we discuss in Chapter 9. In this chapter, we discuss why for many practitioner qualitative marketing researchers, manual methods or basic computer-based methods have been the norm. XSight has been developed in close consultation with practitioner marketing researchers to bridge the gap between the packages designed for the needs of academics and traditional manual methods. The demo will bring to life the challenges faced by qualitative researchers in the amount and nature of qualitative data they may collect and how they make sense of that data.

Sports Marketing Surveys There is a new 'companion' marketing research agency, whose work forms a running case throughout the text. In most chapters, examples will be presented based upon work conducted by the marketing research agency **Sports Marketing Surveys**. This independent marketing research agency has specialised in the sponsorship and sports industry for the past 20 years. The sports industry and many sponsorship deals are often multi-country in their reach and activity and to meet these challenges Sports Marketing Surveys has the capability of working and reporting on a worldwide basis, in over 200 countries, for events such as the Olympic Games, Wimbledon, the Ryder Cup and the Football World Cup. Work from four projects conducted by Sports Marketing Surveys will be used as running examples throughout this book:

Racetrack 2003 – a syndicated study to measure the attitudes and opinions of, and profile, the Formula One fan across eight countries worldwide.

Nestea – sponsorship evaluation in 'Wind, Water and Waves' Hungary and Germany, and *Beach Volleyball* in Italy, Germany and Sweden.

Flora London Marathon 2004 – TV media analysis, public awareness tracking and target market research.

Rugby League – understanding and quantifying the core values of Rugby League and new branding concepts for the game.

Elements of these commercially sensitive projects will be chosen to show how Sports Marketing Surveys managed the challenges of conducting actionable marketing research. There will also be a distinct section on the companion website devoted to Sports Marketing Surveys.

Companion website The companion website has been updated to reflect the changes in this edition. There are new European case studies with discussion points and questions to tackle. All the referenced websites on the text are described with notes of key features to look for on a particular site.

There is a new section on the website devoted to *Marketing Research Software*. This section is based upon the work of three contributors:

Peter Wills is the CEO of SNAP Surveys and a Senior Visiting Fellow at the University of Southampton. He has contributed to the first two editions of this text, writing Professional Perspectives on the impact of the Internet on marketing research and how technology changes affect questionnaire and survey design. Peter has helped a huge variety of organisations with marketing research problems. As well as the SNAP software, his business encompasses training, software implementation and bespoke survey and questionnaire design, data entry, analysis and reporting; especially utilising the Internet but also incorporating the latest technological developments to capture data. He has worked directly with research users and research companies.

Tim Macer is the Managing Director of Meaning and a Senior Visiting Fellow at the University of Southampton. He has established a reputation internationally as an authoritative and independent analyst and commentator on software for survey research, data collection and analysis. He is often called on by industry bodies such as the Association of Users of Market Research Agencies (AURA), the Council of American Survey Research Organisations (CASRO), the Marketing Research Association (MRA) and the Market Research Society (MRS) to speak as an impartial commentator at conferences or training events. Tim regularly contributes to two industry-respected magazines – *Research* in the UK and *Quirk's Review* in the USA – on software and technology. He has contributed to the first two editions of this text, allowing access to his published reviews of the huge variety and applications of software that support marketing research activity.

Karen Thomas is the marketing director of QSR International. She is responsible for their Marketing Strategy, Communications, Customer Service and Business Analyst functions. Karen drew experience from working in Australia and the UK, including senior management positions with a global IT firm and consultancy. QSR are the world's leading supplier of qualitative data analysis software. Their products – NVivo, N6 and XSight – are used in over 90 countries throughout the world. More researchers use QSR products than all other qualitative research software. Karen's work on the marketing research impact of XSight illustrates the innovations of a company with over 20 years' experience in data analysis software development and an in-depth understanding of qualitative research.

Instructors manual The instructors manual is very closely tied to the text, but is not prescriptive in how the material should be handled in the classroom. The manual offers teaching suggestions, answers to all end-of-chapter questions, Professional Perspective discussion points, and case study exercises. The manual includes PowerPoint slides, incorporating all the new figures and tables.

Photography Photographs that accompany any management textbook may be perceived as trivial and mere embellishments. I do not take this view. I see textbook photographs as a means to encapsulate the essence of a subject, its joys and its challenges. In putting together the new colour photographs for this edition, I wanted images that portray the competitiveness, dynamism and creativity of marketing research. The work of Sports Marketing Surveys and many of the other text examples exemplify these characteristics, and the images amplify them. The four-colour design of the book portrays the vitality of marketing research. Some of the images in this edition have a serious intent, linking a particular image to concepts and aiding the recall of a concept. Others are there to lighten the sometimes difficult technical passages. In their own right, each image has many technical and artistic merits.

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Many thanks must go to Stephen Proctor, Managing Director of Sports Marketing Surveys Ltd. I enjoyed working with the fascinating case material of a truly inspirational marketing research company. Many thanks also to Sandra Greer, John Bushell and Erica George, who supported my work with great patience and care.

In putting together the Marketing Research Software section, the demonstration versions of SNAP and XSight and for support in many aspects of my thinking and writing I would like to thank Tim Macer, Karen Thomas and Peter Wills.

For their critique, insight and excellent feedback, I am most grateful to Dr Johan van Rekom of the Erasmus University Rotterdam, Professor Peter Navde of Manchester Business School and Professor David Ford of the University of Bath.

To David Cox at Pearson Education with whom I started this edition, I'm so glad that you've returned from your trip around the globe to see it through! David has been very patient, kind and helpful through some trying times. His advice has always been incisive and inspiring, and he's managed me with great humour and a superb eye for detail. I could not have had better support and I'm very much in your debt.

At Pearson Education the book has also come together with the help of Georgina Clark-Mazo, Desk Editor; Kelly Meyer, who designed the cover; Colin Reed, who helped with the internal design; and Andrew Harrison, Editorial Assistant.

Last but by no means least, to be able to find the time and space to write, the love, support and understanding of your family is vital. Thank you so much mum for all your love. To my partner Helen, enormous thanks and love for all you have put up with in giving me the space and peace to write and to my beautiful son Jesse, who with Helen brings me so much light and joy.

David F. Birks

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Guided tour



Full colour photography throughout vibrantly illustrates key points and examples

24
Multidimensional scaling and conjoint analysis

Objectives
After reading this chapter, you should be able to:

1. describe the basic conceptual principles of multidimensional scaling (MDS) in a primary research and describe its various applications;
2. explain the basic concept of MDS in terms of data, including formulating the problem, identifying the data, selecting the MDS procedure, identifying the number of dimensions, testing the dimensionality and understanding the role of metrics and scaling constraints and utility;
3. explain the MDS scaling of preference data and distinguish between metric and non-metric analysis of preference;
4. explain correspondence analysis and discuss its applications and disadvantages;
5. understand the relationship between MDS, hierarchical analysis and cluster analysis;
6. describe the basic concepts of conjoint analysis, including the MDS and MDS-based methods;
7. describe the procedures for conducting conjoint analysis, including formulating the problem, identifying the stimuli, selecting the levels of each attribute, selecting a conjoint design procedure, measuring the results and assessing reliability and validity;
8. describe the concept of trade-off analysis and explain how it complements the conjoint analysis tool.

Stage flowchart: 1. Define a research problem, 2. Design a research strategy, 3. Gather the data, 4. Analyse the data, 5. Draw conclusions and make recommendations, 6. Report the findings and communicate the results.

Objectives at the beginning of each chapter outline what you should expect to learn from the chapter

Stage flowcharts show how the chapter fits into the six stages of the marketing research process

Chapter 10 Sampling design and procedures

Overview
Sampling is a key component of any research design. Sampling design involves several basic objectives:

1. Should a sample be taken?
2. If so, what procedure should be followed?
3. What kind of sample should be taken?
4. How large should it be?
5. What can be done to control and adjust for non-response?

This chapter introduces the fundamental concepts of sampling and the qualitative and quantitative secondary or survey data systems. It explains the benefits of primary and secondary sampling techniques, the advantages and disadvantages of various sampling techniques, the advantages and disadvantages of different sampling methods and illustrates the correct use of various types of data collection methods. It also discusses the various types of sampling methods and the advantages and disadvantages of each.

Example: Mercedes-Benz, BMW and Audi seem to be the three car manufacturers in Europe.

An Overview summarises the topics discussed in the chapter

Examples analyse specific companies to bring the topics to life

Response rate
The ratio of the number of responses received to the number of questionnaires mailed or distributed.

Example
When respondents are particularly reluctant to give their opinions?

Display measures
Individual and CDTI are a display measure of brand or awareness. In a study involving qualitative responses and a series of 40 display measures, individual and CDTI are a display measure of brand or awareness. In a study involving qualitative responses and a series of 40 display measures, individual and CDTI are a display measure of brand or awareness. In a study involving qualitative responses and a series of 40 display measures, individual and CDTI are a display measure of brand or awareness.

Marginal definitions highlight the key terms in the text

A Glossary of these terms is provided both at the end of the book and on the website at www.pearsoned.co.uk/malhotra_euro



Focus on Sports Marketing Surveys is a set of sports marketing case studies that run throughout the text, including material on the Olympics, Formula One racing and Beach Volleyball

Take these case studies further at www.pearsoned.co.uk/malhotra_euro



International marketing research shows how different aspects of the marketing research process fit into an international context



Ethics in Marketing Research focus on the ethical practice of marketing research and the dilemmas that researchers face

Internet and computer applications illustrate the impact of technology and the Internet on marketing research



Test yourself at the end of each chapter with a set of **Questions**

Exercises help you to apply what you have learnt, by testing your understanding in a practical context



Test your understanding of the key concepts with **Flash Cards** at the *Marketing Research* website



Notes at the end of each chapter list sources to help you take your reading further

About the authors



Dr Naresh K. Malhotra is Regents' Professor, DuPree College of Management, Georgia Institute of Technology. He is listed in *Marquis Who's Who in America*, 51st Edition (1997), 52nd Edition (1998), 53rd Edition (1999), and in the *National Registry of Who's Who* (1999).

In an article by Wheatley and Wilson (1987 AMA Educators' Proceedings), Professor Malhotra was ranked number one in the country based on articles published in the *Journal of Marketing Research* from 1980 to 1985. He also holds the all-time record for the most publications in the *Journal of Health Care Marketing*. He is ranked number one based on publications in the *Journal of the Academy of Marketing Science* (JAMS) from its inception through volume 23, 1995. He is also number one based on publications in JAMS from 1986 to 1995. He is listed as one of the best researchers in marketing in John Fraedrich, 'The best researchers in marketing', *Marketing Educator* (Summer 1997), p. 5.

He has published more than 75 papers in major refereed journals including the *Journal of Marketing Research*, *Journal of Consumer Research*, *Marketing Science*, *Journal of Marketing*, *Journal of Academy of Marketing Science*, *Journal of Retailing*, *Journal of Health Care Marketing*, and leading journals in statistics, management science and psychology. In addition, he has also published numerous refereed articles in the proceedings of major national and international conferences. Several articles have received research awards.

He was Chairman, Academy of Marketing Science Foundation, 1996–1998, and was President, Academy of Marketing Science, 1994–1996, and Chairman of the Board of Governors from 1990 to 1992. He is a Distinguished Fellow of the Academy and Fellow of the Decision Sciences Institute. He serves as an Associate Editor of *Decision Sciences Journal* and has served as Section Editor, Health Care Marketing Abstracts, *Journal of Health Care Marketing*. Also, he serves on the Editorial Boards of eight journals.

His book entitled *Marketing Research: An Applied Orientation*, Third Edition, was published by Prentice Hall, Inc. An International Edition and an Australian Edition of his book have also been published, along with a Spanish translation. The book has received widespread adoption at both the graduate and undergraduate levels with more than 100 schools using it in the USA.

Dr Malhotra has consulted for business, non-profit and government organisations in the USA and abroad and has served as an expert witness in legal and regulatory proceedings. He is the winner of numerous awards and honours for research, teaching and service to the profession.

Dr Malhotra is a member and Deacon, First Baptist Church of Atlanta. He lives in the Atlanta area with his wife, Veena, and children, Ruth and Paul.



Dr David Frederick Birks is a Senior Lecturer in Marketing in the School of Management at the University of Southampton, England. He is the Programme Director for their MSc in Marketing Analytics. Marketing Analytics combines the disciplines of marketing research, database and web metrics, competitor intelligence and the information systems used to support strategic marketing decision making. David teaches quantitative and qualitative marketing research and consumer metrics. His industrial experience was gained in the construction and housing industry in England and Germany. Before university lecturing he worked in purchasing, planning, marketing and research. He has Masters degrees in Marketing Management and in Social Statistics and a PhD in Marketing Information Systems.

David has continued to practise marketing research throughout his university career, managing projects in financial institutions, retailers, industrial organisations, local authorities and charities. He has managed projects as part of undergraduate, MSc, MBA and PhD degree programmes. He was the Head of Marketing Research on the GlobalCash Project, a major study of European cash management banking practices that ran from 1994 to 2004. David helped to develop the research design, research instruments and analyses by coordinating the demands of major pan-European and American banks, and the research requirements of 19 business schools throughout Europe. He edited and made a major contribution to the text *Global Cash Management in Europe* that resulted from the combined research efforts of colleagues in Britain, Denmark, Germany, Ireland, Italy, Norway and Sweden. He has published further research from GlobalCash with colleagues from Aarhus, Denmark. In addition to his Cash Management work, David's publications have covered the fields of Housing, Statistics, Marketing and Information Systems.

David lives in the heart of the city of Winchester in Hampshire. From this very English setting, he brings a cosmopolitan background to this European edition, having an English father, German mother, French grandfather and Belgian great-grandparents.

